

## Villy Bergström: Monetary policy and wage formation in Sweden

Speech by Mr Villy Bergström, Deputy Governor of Sveriges Riksbank, at the HSB Bank's Finansdag, Stockholm, 13 November 2002.

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Let me begin by thanking you for the invitation to come to HSB and for giving me the opportunity to discuss wage formation.

As you know, the Riksbank's objective is an inflation rate - measured against the annual change in the consumer price index (CPI) - limited to 2 per cent, with a tolerance interval of +/- 1 percentage point. As interest rate decisions affect price pressure, partly through resource utilisation, with a certain time lag, monetary policy needs to be based on the total assessment of the rate of price increase one to two years ahead. Payroll expense accounts for approximately 70 per cent of the total value added in the economy and is thus crucial to the development of costs and prices. Wage formation has also gained increased topicality since the Swedish Municipal Workers' Union decided to terminate its collective wage agreement before the third year. The Riksbank's assessment in the October Inflation Report also pointed to high wage increases as a potential risk factor for domestic inflation.

### **New conditions for wage formation in the 1990s**

New conditions for wage formation were created at the beginning of the 1990s. Monetary policy became more clearly focussed on maintaining low inflation and tighter fiscal policy was necessary to consolidate public finances.

At the end of the 1980s, Sweden found itself in a situation with rapidly rising inflation and a rate of wage increase of around 8 per cent, just under half of which comprised wage drift. The high increases in payroll expense in Sweden finally became untenable when demand plummeted in connection with the international recession in 1991. The Carlsson government succeeded after many vicissitudes in parliament in establishing a stabilisation agreement for the period 1991-1992, what was known as the Rehnberg agreement. This included a ban on local bargaining and thus wage drift. The inflationary flexibility clauses were abolished. The Rehnberg agreement contributed, alongside lower inflation, falling profit margins and a severe decline in demand, to a reduction in the rate of wage increase from approximately 10 per cent in 1990 to around 4 per cent in 1992. The agreement expired in 1992, but was in practice extended, after a normative agreement was signed in the trade sector.

When the 1995 collective wage agreement bargaining began, there was still considerable uncertainty. The krona had weakened significantly following the Mexico crisis and the budget consolidation process was not yet complete. There was a risk that inflation might accelerate again, partly because of a sharp rise in producer prices in the wake of the krona depreciation.

The Swedish Trade Union Confederation's attempts at coordination in wage bargaining failed, while the employers were calling for decentralised wage formation. 1995 proved to be a year filled with conflicts. The agreed wage increases came out at an average of around 3.5 per cent a year during the agreement period 1995-1997, while the average rate of wage increase was just over 5 per cent. The increase in productivity during the same period was 1.8 per cent a year. Wage development was thus scarcely compatible with the inflation target of 2 per cent. At the same time, open unemployment remained high. During the wage agreement period 1995-1997 open employment was over 8 per cent. The bargaining rounds in 1995 cannot therefore be considered a success from the economy's point of view.

In 1998 it was time for the next round of central wage agreement bargaining. By then CPI inflation had fallen. The Riksbank also raised its repo rate at the end of 1997, partly due to the risk of rising wage inflation. The 1998 bargaining round took place during the aftermath of the Asia crisis, while the krona appreciated significantly, which probably had a subduing effect on wage demands in the export industry. These negotiations entailed the herald of a new "Saltsjöbaden spirit" in the Swedish labour market with the signing of the 1997 Industrial Agreement by twelve employers' associations and seven

trade unions in industry.<sup>1</sup> The Industrial Agreement, which covered approximately 600 000 employees and ran for a period of three years, was meant to provide a foundation for a good wage development by promoting industrial development, profitability and competitiveness. The agreement primarily contained important rules on the system of negotiating, such as rules to reduce the risk of periods with no agreement and to reduce the risk of conflicts breaking out. Similar bargaining agreements were signed between the parties in the central government, local and regional government sectors and for white collar workers in commerce. These agreements stipulated that industry should lead the way in wage agreements in relation to other sectors of the economy, an idea that originated in the EFO model designed by the Swedish Trade Union Confederation (LO), the Confederation of Swedish Enterprise (SAF) and the Swedish Confederation of Professional Employees (TCO) at the end of the 1960s.<sup>2</sup>

There was also a development towards a more decentralised and individualised wage formation, which has had a subduing effect on wages. Many agreements gave the local social partners the freedom to determine and distribute the wage scope themselves. However, the local negotiating scope was often limited to some extent by block rules regarding the size of this scope and guarantees for a minimum wage increase for each individual.

The 1998 bargaining rounds marked a break in trend with regard to the rate of wage increase. The annual nominal rate fell from approximately 8 per cent during the period 1970-1997 to around 3.5 per cent during the period 1998-2000. The outcome may be regarded as moderate taking into account the rapid recovery in the economy and the large increase in employment that took place during the period covered by the agreement. The fact that there were unused resources also helped to keep down the rate of wage increase. Low inflation meant that real wages increased considerably. During a 20-year period up to the mid-1990s, real wages rose by an average of only 0.5 per cent a year, but over the past five years the average increase in real wages has been approximately 3 per cent a year.

The development towards a more decentralised wage formation process continued in the 2001 bargaining rounds. All those in the central government sector have local wage formation, compared with around one-fifth in the private sector. Some of the agreements signed were completely without figures so that everything was determined at local level, without any individual guarantees or centrally-established levels. This applies to one-third of the employees in the public sector and 7 per cent of those in the private sector.<sup>3</sup>

Prior to the 2001 bargaining rounds, the unions in LO decided to improve the wage situation for women in the public sector in relation to industrial workers. However, the wage bargaining between the employers and the Swedish Municipal Workers' Union broke down and after mediation the social partners reached a central agreement that entailed wage increases of around 3.7 per cent a year during the period 2001-2003, with the possibility of local agreements on higher wage increases. The Municipal Workers' Union agreement was thus one of the most advantageous among the LO unions.

This time, nurses and teachers were the first onto the field with regard to wage bargaining and they signed 5-year agreements, which roused some concern that high wage agreements stemming from the favourable demand situation would spread to the rest of the labour market. The average level of the wage agreements in the economy was around 3 per cent, which is slightly higher than the previous bargaining round in 1998, when the agreements came out at around 2.6 per cent. However, it shows that the social partners have moved closer to a non-inflationary wage agreement, despite the fact that economic activity was high when the bargaining rounds began in autumn 2000.

### **Why has the rate of wage increase been subdued over the past decade?**

Studies made by the Riksbank show that the slowing down in the rate of wage increase during the 1990s was primarily due to the fact that the formulation and organisation of monetary policy had led to lower inflation expectations (since 1996 inflation expectations among the social partners have

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<sup>1</sup> See, for instance, Nils Elvander, "Industriavtalet och Saltsjöbadsavtalet - en jämförelse" (The industrial agreement and the Saltsjöbaden agreement - a comparison), Arbetsmarknad & Arbetsliv No. 3, 2002, pp. 191-204.

<sup>2</sup> Gösta Edgren, Karl-Olof Faxen & Clas-Erik Odhner, Wage Formation and the Economy, Allen and Unwin, 1973.

<sup>3</sup> The National Mediation Office, "Avtalsrörelsen och lönebildningen 2001" (Bargaining rounds and wage formation 2002), annual report from the National Mediation Office, 2002.

fluctuated between 1.5 and 2.7 per cent) but also to the fact that the demand for labour declined in connection with the economic recession at the beginning of the 1990s.<sup>4</sup> A high level of credibility for the inflation target has pushed down inflation expectations. Stable inflation expectations make it easier for the social partners to negotiate new wage agreements. They do not need to worry that pay packets will contain mostly air and they have no need to safeguard by demanding high nominal wage increases, as was often the case before.

The institutional changes in wage bargaining may also have contributed to more subdued wage increases. The coordination of wage bargaining rounds with centrally-established agreement levels, but a local distribution of wages, mean that the cost to society of excessive agreements is accounted for and that market forces exercise a restraining influence on wage demands at local level.<sup>5</sup>

The tendency towards a greater element of local wage formation has made the wage process more flexible during the 1990s. Other important explanations are that new compensation methods, such as bonus wages and profit-sharing have been introduced in many areas of the labour market, which has probably increased flexibility. Companies are then able to reduce their payroll expense to some extent during downturns in the economy. During the 1990s, there has also been a development towards limited period employments, which should lead to greater flexibility in the labour market. These new elements in the functioning of the labour market may help the Riksbank to combat inflation and will probably be good for growth and thus employment in the long term. However, they must be weighed against a possible deterioration in security of employment for the individual.

### **How high can the rate of wage increase go without causing inflation to accelerate?**

In the long term the development of real wages must reflect the labour force's ability to produce goods and services. Thus, real wages can only rise as long as productivity is increasing. If real wages rise faster than productivity, companies are forced to either raise their prices if they can, which means that inflation rises, or to reduce their labour force or curtail their operations. Nominal wages can thus increase by the total of the inflation target of 2 per cent and the growth in productivity. If we assume that the Swedish productivity rate trend is approximately 1 to 2 per cent, a reasonable assessment is that an average increase in payroll expense of around 3.5 per cent should be sustainable in the long term. However, it is important to point out that the arguments regarding wage scope are based on several assumptions. The first concerns an increase in total payroll expense, i.e. both wage increases through collective or local bargaining and other types of increase in payroll expense, such as payroll tax and collective charges. The second entails initial profit margins being sufficiently high to stimulate investment and enable continued rapid growth in the economy. The final assumption concerns the overall, average wage scope for the country as a whole. The definition of a long-term sustainable wage increase may differ between sectors and regions depending on the different conditions for production technology, productivity development and competition.

If the economy is not balanced, there may be a short-term deviation in nominal wage developments from the long-term sustainable level. This could be due to a stronger exchange rate, for instance. The inflation target is expressed in terms of CPI, which consists of the prices of both imported and domestically-produced goods and services. If imported inflation, which comprises approximately one-third of CPI, develops weakly as a result of a stronger krona or lower international price pressure, domestic prices may rise more rapidly than 2 per cent over a period of time without causing a threat to the inflation target. There is then temporary scope for nominal wage increases above the level implied by productivity growth.

Payroll expense has risen on average by approximately 3.9 per cent a year from the beginning of the 1990s up to 2001, which is slightly more than the "wage norm" implies. At the same time, inflation has been at an average of only 1.8 per cent. An important explanation as to why the increase in payroll expense could be so high without triggering an acceleration in domestic inflation is that productivity has developed strongly. Since the beginning of the 1990s, the increase in productivity throughout the

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<sup>4</sup> Friberg, K. and E. Uddén Sonnegård, "Changed wage formation in a changing world?", Sveriges Riksbank Economic Review 1, 2001.

<sup>5</sup> Calmfors, L. & Driffill, J., (1988), "Bargaining structure, Corporatism and Macroeconomic Performance", Economic Policy 6.

economy has been approximately 2.0 per cent, while the average increase during the 1980s was only around 1.2 per cent.

The strong growth in productivity at the beginning of the 1990s was partly due to the fact that primarily companies with low productivity were driven to closure during the crisis, at the same time as there were extensive cutbacks in staff. There has also been a structural transformation in Swedish trade and industry towards a more knowledge-intensive production. During the second half of the 1990s there were deregulation processes in several fields, for instance the electricity and telecommunications markets, which led to an increase in productivity. In addition, Sweden benefited from the strong growth in the IT and telecommunications sector, which has shown greater increases in productivity than other areas of the economy. Increased use of IT in traditional manufacturing industry and service operations probably also contributed to the increase in productivity. In addition and at a more general level, greater macroeconomic stability has probably reduced uncertainty and facilitated long-term investment decisions, which in the longer term is positive for the development of productivity.

There were also considerable unused resources following the crisis at the beginning of the 1990s, which could be put into use when the economy recovered. Between the years 1991 and 1994 approximately 500 000 jobs disappeared; many of those who lost their jobs left the labour force but have returned as economic activity has picked up. Even today we have not returned to the employment levels prevailing before the crisis in 1991.

When demand in the economy slackened in connection with the international downturn in economic activity last year, many companies chose to retain personnel because unemployment was at a low level and it would be difficult to obtain new labour. As a result, productivity developed weakly during 2001. Compared with earlier economic downturns, the decline in productivity was modest. Now that companies have begun to utilise more effectively the labour they had retained, we can see that productivity has increased by 2.6 per cent during the first half of this year, compared with the equivalent period last year. The fact that a large part of the increase in productivity in the 1990s can be attributed to certain industrial sectors, such as the IT and telecommunications sector, whose relative significance has declined, indicates that productivity will grow at a more modest rate in future. However, a continued macroeconomic stability that facilitates long-term decision-making, a higher level of education during the 1990s and certain improvements in competitive pressure indicate that productivity growth can be higher in future than during the 1970s and 1980s.<sup>6</sup>

### **Future challenges for wage formation**

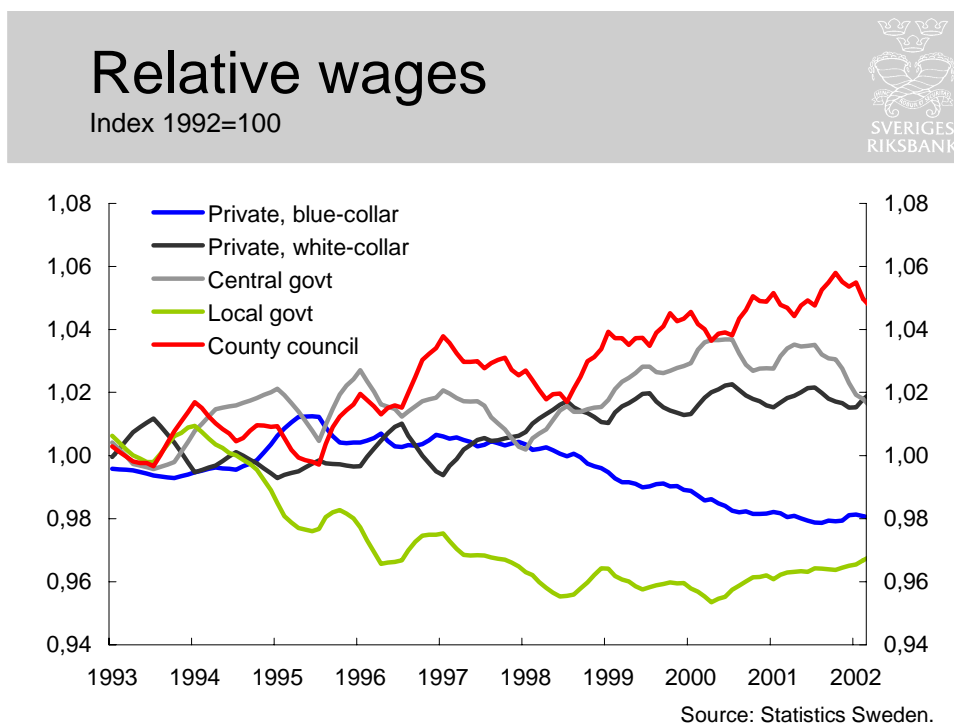
The Municipal Workers' Union's termination of its collective wage agreement for 450 000 members before the third year and the demand for relative wage changes entail touchstone for wage formation. The union has for a long period watched its wages situation deteriorate in relation to industrial workers and other groups in the public sector. During the previous bargaining rounds, however, the LO unions were agreed that the Municipal Workers' Union should receive higher wage increases than the other member unions in order to improve its relative wages. However, the union is dissatisfied with the outcome so far, which it claims has given only 0.4 percentage points above the wage increases achieved through collective bargaining. This union's members are currently among those with the lowest wages in the labour market, with an average wage of approximately SEK 16 000.

The Municipal Workers' Union's wage demands are not in themselves a threat to the inflation target, as long as other groups in the labour market are prepared to stand back in favour of this union's members. However, there is a risk that other trade unions will follow their example and also demand higher wages. Approximately 70 per cent of the employees in trade and industry have the possibility of renegotiating their agreements during the final year of the agreement. Already, there have been demands for compensation if the Municipal Workers' Union members should be given higher wages. However, several trade unions, such as Metall (the Swedish metalworkers' union) and SIF (white-collar workers' union), whose agreements cover approximately 300 000 employees, have stated that they do not intend to terminate their agreements in advance.

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<sup>6</sup> See the box "Has potential growth slackened?" in Inflation Report 2002:2.

There has thus been a relative deterioration in wages for the members of the Municipal Workers' Union over a long period of time. However, restoring wage relations must also take its time. In a low inflation economy it is only possible to achieve marginal changes in one year.



The Municipal Workers' Union is not the only one to have seen its wage position deteriorate in relation to other professional groups. Another example is industrial workers, who have seen a deterioration in their wage position relative to nurses and teachers, groups that have had a very good wage development in recent years. In general, blue-collar workers' wages have increased more slowly than those of white-collar workers and wages in the local government sector have increased more slowly than those in the private sector, while wages in central government and regional government have developed relatively well. Relative wage changes are perhaps the most difficult wage formation issue in a low inflation economy, as the social partners must be able to manage wage imbalances between different groups' wage situations without generating a wage spiral. Employees do not merely watch real wages, but also their relative wages, which were previously institutionalised with earnings development guarantees built into the agreements. Previously, high inflation facilitated relative wage changes, but in a low inflation regime it is more difficult for a group to raise its wages as it must entail other groups receiving lower nominal rises and perhaps no real increase.

At the same time, one must be aware that relative wage changes are a necessary element in a market economy. There is currently a shortage of labour in health and welfare, so from a labour market perspective it is natural that this shortage will be expressed in higher relative wages in these areas. Larger retirement pensions combined with a greater need for care services over a longer period due to demographic developments will aggravate this labour shortage in future. The total recruitment needs in health and welfare professions are estimated by the Swedish National Labour Market Administration (AMS) to be approximately 527 000 persons up to the year 2015, of which 180 000 are professions requiring university level training and 347 000 are professions requiring upper secondary school level training, such as care personnel.<sup>7</sup> Given the present training dimensions, this entails a deficit of around 22 000 persons a year up to the year 2015. The low wages make new recruitment difficult and the number of applicants with the upper secondary school care programmes as their first choice has

<sup>7</sup> Swedish National Labour Market Administration (AMS), Den framtida personalförsörjningen inom vård och omsorg - Tillgång och rekryteringsbehov fram till år 2015 (Future personnel supply in health and welfare - Supply and recruitment needs up to the year 2015), Ura 2002:3.

declined nationwide from approximately 12 000 persons in 1990 to around 3000 in 2001.<sup>8</sup> Prior to the present academic year, there were only 11 people who had the care programme as their first choice here in Stockholm county. These groups have market forces behind them.

Nurses and teachers are examples of professional groups that have received support from market forces to raise their wages in recent years. The large demand in relation to supply has meant that nurses have increased their wages by an average of 25 per cent over the past five years.<sup>9</sup> The shortage of nurses is expected to intensify in the near future and AMS' short range forecast has nurses on top of the list of immediate shortages. Although there is considerable interest in nursing training - the number of applicants with this as their first choice amounted to 3.2 per place on a course for the previous academic year - the number of course places is insufficient.<sup>10</sup>

Teachers have also succeeded in raising their wages in recent years. Last year wages for upper secondary school teachers increased by an average of 6 per cent. The baby boom of the 1990s means that the shortage of teachers will increase and peak in 2005, when there will be a shortage of 23 000 teachers - the greatest need is for upper secondary school teachers.<sup>11</sup> There may be a need for relative wage changes to encourage more people to train as teachers and to remain in the profession. If we take the example of a teacher in science subjects, such as mathematics and general science, this person would probably also be capable of attaining a Master of Engineering degree. The wage difference between these professions is very large. The highest paid upper secondary school teachers in mathematics and science earn approximately SEK 25 000 kronor a month, while a competent graduate engineer can earn many times this amount.<sup>12</sup>

There is a risk that the shortages we see in the labour market, and which clearly motivate wage increases for certain professional groups, lead to an inflationary rate of wage increase. It is therefore important for the Riksbank to analyse the supply side of the labour market. So far there is mainly a shortage of persons with certain healthcare training and of teachers in science and technical subjects. In the longer term, however, a lower supply of labour is expected and an increase in demand. The population increase that Sweden has experienced during the 1990s will gradually decline and with effect from 2010 growth in the working population will be negative.<sup>13</sup> The large population growth among the younger and older age categories risks reducing labour force participation, as these age groups generally have a lower participation than average. In addition, there is a proposal for shorter working hours with effect from 2004, which risks reducing the labour supply measured in hours even further.

### **Wage development during the forecast period**

Over the past year employment has developed at a surprisingly strong rate, despite the subdued demand in the economy. The labour force reserve should be regarded as small, if one uses the registered labour force as a measure. The percentage of unemployed and persons in labour market policy programmes amounted to 6.7 per cent in September. In the October Inflation Report the Riksbank made the assessment that the labour market would be austere in future, which would result in wage increases of approximately 4 per cent over the next two years. The forecast took into account the fact that the shortage in local authorities and county councils could lead to higher wage increases in these sectors than in trade and industry. However, the strained economic situation in many local authorities and county councils limits the scope for wage increases.

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<sup>8</sup> The National Agency for Education (2002), Barnomsorg, skola och vuxenutbildning i siffror (Childcare, schools and adult education in figures).

<sup>9</sup> Statistics Sweden's structural wages statistics.

<sup>10</sup> Swedish National Labour Market Administration (AMS) (2002), Den framtida personalförsörjningen inom vård och omsorg - tillgång och rekryteringsbehov till år 2015 (Future personnel supply in health and welfare - Supply and recruitment needs up to the year 2015), Ura 2002:3.

<sup>11</sup> The Swedish Association of Local Authorities, "Personalen i fokus 2000" (Personnel in focus 2000), 2001.

<sup>12</sup> Statistics Sweden's structural wages statistics.

<sup>13</sup> Statistics Sweden.

During 2001 productivity growth was very weak, but so far this year productivity has developed relatively strongly. The rate of increase is expected to be somewhat subdued over the coming two years as an increase in demand occupies a larger percentage of companies' resources. Unit labour costs are therefore expected to be halved next year compared with last year, which should check domestic inflation. In addition, we still believe in an appreciation of the krona during the forecast period due to fundamentals, which have subduing effect on imported inflation. It is therefore estimated that payroll expense could increase by an average of just over 4 per cent a year during the forecast period without any threat to the inflation target. However, 4 per cent is too high in the slightly longer term. There is a great risk that this figure will become established as a norm, as payroll expenses have increased by approximately 4 per cent a year over the past five years. If Sweden were to participate in Stage Three of EMU, we cannot have a rate of wage increase that deviates from the average in the euro countries. If the "norm" for payroll expense increases is 3.5 per cent, this means that nominal wage agreements must be signed at lower levels. This is because the scope must also cover wage drift and other wage costs, such as collective fees and reductions in working hours.

### **Conclusion**

In the October Inflation Report we foresaw a slightly more prolonged economic recovery than had earlier been expected. The weak development in the financial markets in the wake of bankruptcies and accounting scandals had contributed to the start of a decline in confidence from companies and households. In Sweden demand had been upheld relatively well, but it was estimated that fiscal policy needed to be tightened up to manage the expenditure ceiling. This means that growth may be more subdued in future. Inflation was assumed in the main scenario to be in line with the inflation target one and two years ahead, albeit at the lower edge of the interval. The risks we foresaw for Swedish inflation were mainly related to developments in the financial markets and to wage formation. In that situation, we chose to leave the repo rate unchanged and decided to hold an extra monetary policy meeting, which will take place tomorrow.

The Municipal Workers' Union's termination in advance of the third year of its collective agreement need not in itself constitute a threat to the inflation target, as long as other groups in the labour market are prepared to stand back in favour of this union's members. However, if other groups were also to demand higher wages, the inflation target might be threatened. The Riksbank would then be forced to tighten monetary policy by raising the repo rate, which would lead to lower growth and employment. During the past two wage bargaining rounds in 1998 and 2001, the social partners indicated that wage formation had improved. It remains to be seen whether wage formation is now sufficiently flexible to manage the necessary changes in relative wages. Thank you.